FOSTERING PARTNERSHIP BETWEEN TVET INSTITUTIONS AND INDUSTRY IN LAGOS STATE OF NIGERIA FOR SUSTAINABLE NATIONAL ECONOMY.

BY

[1]UKONZE, JULIANA. A. (PhD) & [2]AJALA, OLUWOLE. SAMUEL,
[1]Department of Agricultural Education,
University of Nigeria, Nsukka, Enugu State.
[2]Agricultural Education Department, Adeniran Ogunsanya
College of Education, Oto-Ijanikin, Lagos State.
[1]juliana.ukonze@unn.edu.ng [2]ajpompey@yahoo.com

Abstract

This study investigated how partnership can be fostered between TVET institutions and the industry. The study adopted the descriptive survey research design. Four research questions guided the study. The population of the study was made up of 345 Teachers and Lecturers in TVET departments in the Adeniran Ogunsanya college of education, Ijanikin and Michael Otedola Primary College of Education, Epe and the Government Technical colleges, Ado-soba all and as well as Nestle Plc., Ilupeju in Lagos State. The respondents were 180 in number which comprises of 50 TVET Teachers and Lecturers from each institutions and 30 technicians from the industry which were selected through random sampling technique. The questionnaire was used for data collection which was validated by three lecturers. The reliability of the study was ascertained using the Cronbach's Alpha correlation technique which yielded 0.89. The Mean was used to analyze the data collected. The study revealed that the students industrial working experience scheme is the only existing linkages between the TVET institutions and the industry. The researchers recommended amongst others that the government should as a matter of urgency set up policies requiring compulsory linkages between institutions and industry in relevant areas in order to foster employability skills among the TVET graduates.

Key words: Foster, Partnership, TVET institutions, Industry, Economy

Introduction

The 21st century is accompanied by its attendant plethora of problems which include globalization, information and communication technology, unskilled workforce due to the expansion of multinational companies to meet the demands of technological changes. Wilson (2001) described the challenges associated with globalization which justified integration of academics and vocational education.In his view on the need for TVET reforms,Wilson argued that with this increasing demand on higher-order skills and their central role in the global knowledge-based economy,comes a renewed focus on the potential of TVET to equip the teeming workforce with the abilities to seize available work opportunities and profit from globalization thereby placing TVET in a gargantuan position in helping economies to break out of global poverty and social instability. TVET is one of the recognized and effective process by which up to date, well informed and knowleadgeable workers are prepared, trained or retrained world-wide. TVET is an acronym of technical and vocational education and training, according to UNESCO and ILO (2002). The learning experiences, according to Abubakar (2010), may occur in variety of learning context including educational institutions and workplace. In Nigeria, the teaching of skills in the formal sector exists in two types of institutions (Oziegbe, 2009).

TVET is a skill-based program designed for sub-professional level education and on a specific vocation which is any form of education whose primary purpose is to prepare persons for employment in a recognize occupation or occupations through education and training to acquire practical skills, knowledge and understanding necessary for employment in a particular occupation or trade.

Nigeria is presently rated as one of the poorest nations in the world with debilitating youth unemployment (Nwanegbo & Odigbo, 2013) . TVET as an important sub sector in Nigeria, has been identified as a bailout of this unemployability imbroglio. In view of this, it became pertinent to establish the NBTE in January, 1977 to standardize curricular development and regulate accreditation process in TVET institutions. In Nigeria, TVET is usually carried out in specialized institutions such as industrial and training institutions, Polytechnics, Universities, Vocational and technical institutions as well as the informal sectors.The Federal Republic of Nigeria (FRN) captured the objective of TVET in the National Policy on Education (NPE) (FRN,2004) as : To acquire technical and vocational skills, to expose recipients to career awareness by exploring options useable in the world of works, to enable youth develop an intelligent understanding of the complexity of technology and to stimulate creativity.

Generally, the most common reason advanced for college-industry partnerships is the need to ensure that the curriculum of TVET institutions is aligned to the needs of the workplace to ensure a smooth transition from college-to-work. Osinem and Nwoji (2010) stated that the linkage between education and industry is essential for preparing young people to be enthusiastic and efficient employees. They are of the view that such partnership would be a positive response to educational initiatives to strengthen the links with commerce and industry sub-sectors. The need to create working partnerships between TVET colleges and stakeholders, particularly industry, is therefore borne out of the intention to make TVET stakeholders who are the industries. This is because the industrial and technological development of a country is used as a yardstick for grouping nations into super-power, world-power, developed, developing or poor countries.

Purpose of the Study

The main purpose of the study is to investigate how partnership can be fostered between TVET institutions and the industry in Lagos-State of Nigeria. Specifically, the study examined the

1. Linkages that exist between TVET institutions and industries in Lagos-State of Nigeria.
2. Challenges to fostering partnership between TVET institutions and industries in Lagos-State of Nigeria.
3. Strategies for fostering of partnership between TVET institutions and industries in Lagos-State of Nigeria.
4. Prospects for sustaining partnership between TVET institution sand industries in Lagos-State of Nigeria.

Research Questions

The following research questions guided the study:

1. What are the linkages that exist between TVET institutions and industries in Lagos State of Nigeria?
2. What are the challenges to the fostering partnership between TVET institutions and industries in Lagos State of Nigeria?
3. What are the strategies for fostering partnership between TVET institutions and industries in Lagos State of Nigeria?
4. What are the prospects for sustainable partnership between TVET institutions and industries in Lagos State of Nigeria?

Statement of the Problem

Over the years Technical and Vocational Education and Training (TVET) have been delivered by different providers at various qualification levels. Public TVET institutions are saddled with the responsibility of producing

middle level technical graduates. Upon the numerous fragmented deliveries of TVET programmes, there still exist a dearth of craftsperson and highly-skilled technician due to the absence of a systematic assessment and certification system there are currently no mechanisms to recognize informal occupational learning and hence lacked relevance to the workplace reality. Though government has committed itself to overhauling and reforming the basic framework conditions of the TVET system, nevertheless, this reform process has been slow and as a consequence, the programmes, by-and-large, do not address actual competence needs in the economy, with most programmes being of low quality and theory-driven due to resource constraints and lack of skilled TVET teachers. A systematic integration of TVET with the world of work has not yet been achieved.

Methodology

This study adopted the descriptive survey research design. The researchers considered this design appropriate since no variable was manipulated in this study. The population of the study was made up of 345 teachers and Lecturers in TVET departments (technical education, business education, agricultural science education, home economics education, and music education) in The Adeniran Ogunsanya College of education, Ijanikin, Michael Otedola Primary College of Education, Epe and The Government Technical colleges, Ado-soba all in Lagos State as well as Nestle respondents were 180 in number which comprises of 50 TVET Teachers and Lecturers from each institution (150) and 30 technicians from the industry which were selected through random sampling technique. Data was garnered through a structured A five point Likert scale questionnaire tagged "Questionnaire on partnership between TVET institutions and industries" (QOPBTIAI) which was divided into two parts A and B. Part A consisted of the bio-data of the respondents while Part B was further divided into four sections (Section A-D) with 29 items in the questionnaire used to elicit information needed to answer the research questions posed in the study. The questionnaire was faced validated by three lecturers from Lagos State University, Ojo. The reliability of the (QOPBTIAI) was tested by first administering the questionnaires to twenty (20) Lecturers from the Department of Business Education, Lagos State University, Ojo who were not part of the sample under study and the Cronbach's Alpha reliability technique was used to ascertain the reliability which yielded 0.89 which implies that the instrument was reliable. The researchers with the assistance of three research assistants administered the questionnaire to the respondents and collected the questionnaire on the spot, thus recording a hundred percent return rate. The Mean was used to analyze the research questions. Mean values of 3.50 and above were accepted while mean values below 3.50 were rejected.

Results

The results are presented based on the order of the research questions and hypotheses.

Research Question One:

What are the linkages between TVET institutions and industries in Lagos State of Nigeria?

Table 1: The mean responses of respondents on the existing linkages that exist between TVET institutions and industries in Lagos State of Nigeria?

S/N	ITEMS STATEMENTS The following linkages exist b/w TVET institutions and industries;	N	$\bar{X}$	DECISION
1.	There is staff exchange from time to time	180	1.00	Disagreed
2.	There is constant research partnership	180	1.44	Disagreed
3.	Student industrial work experience(SIWES)	180	3.50	Agreed
4.	Instructors industrial training scheme	180	1.00	Disagreed
5.	There is equipment and facilities sharing	180	1.00	Disagreed
6.	There is joint curricula development of targeted skills	180	1.44	Disagreed

The result of data analysis as presented in table 1 above shows that items 1,2,4,5 and 6 were all below the mean cut-off point of 3.50 while only item 3 was above the mean cut-off point. This indicates that the respondents disagreed with item statements 1,2,4,5 and 6 and agreed only with item statement 3 alone.

Research Question Two:

What are the barriers to fostering partnership between TVET institutions and industries in Lagos State of Nigeria?

Table 2: The mean responses of respondents on the barriers to fostering of partnership between TVET institutions and industries in Lagos State of Nigeria?

S/N	ITEMS STATEMENTS **The following are setbacks to fostering partnership with industries:**	N	$\bar{X}$	DECISION
1.	The work assigned to the students differs from what the student-trainee has been taught	180	3.54	Agreed
2.	The student-trainees are not allowed free access to the industries' equipment, tools and facilities	180	3.51	Agreed
3.	Industries are not consulted during the accreditation process of a course curriculum in formal and informal TVET institutions.	180	4.00	Agreed
4.	The students do not have basic knowledge of the work-place and finds it difficult to socialize	180	3.5	Agreed
5.	The time frame allotted to the student attachment to industries is not usually enough	180	4.00	Agreed
6.	There is no adequate monitoring and evaluation of the partnership between TVET institutions and the industries	180	3.53	Agreed
7.	Inadequate investment in training infrastructure, facilities and staff development of TVET	180	4.0	Agreed

The result of data analysis presented in table 2 reveal that all the items had their mean ranging from 3.51-4.0 and hence above the mean cut-off of 3.50. This indicates that all the respondents agreed on the item statements as the ba *Ukonze, J. A. & Ajala, O. S.* partnership between TVET institutions and industries.

Research Question Three

What are the strategies for fostering partnership between TVET institutions and industries in Lagos State of Nigeria?

Table 3: The mean response of respondents on the strategies for fostering partnership between TVET institutions and industries in Lagos State of Nigeria?

S/N	ITEMS STATEMENTS **The following are strategies for fostering TVET partnership with industries:**	N	$\bar{X}$	DECISION
1.	The work to be assigned to the students trainee must be congruent with practical skills acquired in the school	180	3.78	Agreed
2.	The understanding of the culture of the industries by the student-trainees should be made paramount.	180	3.67	Agreed
3.	There should be regular consultation between the TVET institutions and the industries on arriving at competency tasks for job specification	180	4.00	Agreed
4.	The TVET institutions should keep pace with technological advancements and upgrade their equipment and tools.	180	3.83	Agreed
5.	TVET system must be labour-market relevant, equitable, efficient, and of high quality.	180	3.78	Agreed
6.	TVET industry-academia curricula reform councils should be established to formulate market-relevant and high quality curricula in TVET key skills	180	3.94	Agreed
7.	There should be concerted effort to create synergies and share responsibilities for the industry and TVET institutions on TVET policies	180	3.72	Agreed

The result of data analysis presented in table 3 shows that all the items had their mean ranging from 3.67-4.0 and therefore above the mean cut-off of 3.50. This indicates that all the respondents agree on the item statements as the strategies for fostering partnership between TVET institutions and industries.

Research Question Four

What are the prospects for sustainable partnership between TVET institutions and industries in Lagos State of Nigeria?

Table 4: The Mean response of respondents on the prospects for sustainable partnership between TVET institutions and industries in Lagos State of Nigeria?

S/N	ITEMS STATEMENTS **The following are perceived prospects in fostering partnership between TVET institutions and industries;**	N	$\bar{X}$	DECISION

1.	TVET institutions and industries partnerships shoul adequately funded by the different arms of government.	180	4.00	Agreed
2.	The Government should enact legislative backings and provide adequate policies and actions that for sustainable robust TVET partnership between TVET institutions	180	3.61	Agreed
3.	A functional quality assurance system for TVET programmes should be put in place for effective monitoring and evaluation of the partnership	180	4.00	Agreed
4.	TVET curriculum should be reviewed to be tailored towards the skills required for job specification in industries	180	3.75	Agreed
5.	The Government should promote the establishment of more industries by providing an enabling environment	180	3.54	Agreed
6.	The Government should introduce policies and incentives that will support increased private sector participation in TVET delivery;	180	3.53	Agreed
7.	The Government should finance the development, launch and mainstreaming of teaching/training modules in entrepreneurship and TVET key skills at universities, polytechnics and TVET institutions.	180	3.50	Agreed

The result of data analysis presented in table 4 reveal that all the items had their mean ranging from 3.54-4.0 hence above the mean cut-off of 3.50. This indicates that all the respondents agree on the item statements as the prospects for fostering of partnership between TVET institutions and industries.

Discussions

The findings show that linkage only exists between TVET institutions and industries in Lagos State in area of Students industrial work experience scheme (SIWES). This is in line with the studies carried out by Choi (2001) in Korea which showed that linkages between schools, vocational colleges, junior colleges and industry also revolved around the provision of workplace training for students. The data revealed that most respondents concurred that no linkages exists in areas of sharing equipment and tools, instructor's industrial training scheme.

This makes it difficult for the students to effectively perform in the industries when employed as they may not be able to operate the modern sophisticated tools, equipment and machines. The findings also reveal that there is no staff exchange from time to time between the two sectors. The exchange of staff which is necessary in order for the industry workers as well as the lecturers to be able to get acquainted with each other through sharing knowledge in line with new technological advancement. This is incongruent with Fannell (2007) who stated that partnership can be fostered through sharing of personnel between the both sectors thereby bringing about a shared set of incentives and common culture. The data also reveal that there is no form of research partnership between TVET institutions and the industries. This situation was also reported by Perkinson (2006) whose study indicated that in China, collaboration between TVET and industry was also low and pointed out that in order to create a vision for a modern TVET system, there should be collaboration between the industry and TVET providers and the key challenge for policy makers in China being creation of stronger connection between providers and industry also this is also in congruent with Amissah (2006),who stated that in Ghana, TVET Linkages with industry in terms of input for curricula development are

weak resulting in mismatches of supply and demand of skills.

Table 2 was used in answering Research question 2 and it revealed that the respondents all agreed item statements on the barriers of fostering partnership between TVET institutions and industries. This findings is corroborated by Several studies (Nwogu and Nwanoruo, 2011; Udoka, 2010; Yusuf and Soyemi, 2012) which has reported that the challenges of TVET are numerous, which include among others, inadequate human and material resources in terms of quality and quantity; poor funding of TVET, inadequacies in infrastructural facilities; poor quality preparation of lesson by TVET teachers; and social vices. Yakubu (2003) also supported this finding when he reported that inadequate investment in technical and vocational education has greatly contributed to its deterioration and further aggravated its relatively low effectiveness and efficiency.

Table 3 was used to answer Research question 3 and it revealed that all the item statements on the strategies for fostering partnership between TVET institutions and industries were agreed upon by the all respondents. The findings reveal that the work to be assigned to the students' trainee must be congruent with practical skills acquired in the school and this is supported by Zain, (2008) who opined that in tertiary education agenda, it is a practical-oriented approach whereby students undergo intensive practical sessions. The findings also showed that the understanding of the culture of the industries by the student-trainees should be made paramount and also there should be regular consultation between the TVET institutions and the industries on arriving at competency tasks for job specification. This implies that TVE using the CBET approach can respond, not only to the needs of different types of industries, but also to the different training needs of learners from different socio-economic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods (Adebambo, 2007). The findings reveal that there should be concerted effort to create synergies and share responsibilities for the industry and TVET institutions on TVET policies thus this advocates greater coherence between private and public sectors (WEF, 2004) and also calls for eff *Ukonze, J. A. & Ajala, O. S.*
sectors (Wikipedia, 2011) as well as stakeholders in TVET for adequate technological advancement and human development (Ezeji, 2011).The students trainees gain more through the collaboration and sharing of knowledge if it exist in private – public partnership between the industries and the TVET institutions.

Table 4 was used in answering Research question 4 and it showed that all the respondents agreed to the prospects posited for fostering partnership between TVET institutions and industries. The findings revealed that TVET institutions and industries partnerships should be adequately funded by the different arms of government. This is line with the argument of Okuwa (2005) who stated that the industrial training fund (ITF) was established to provide TVET trainees with actual work practice in both private and public sector organizations (OECD, 2008) but because of inadequate funding and poor management agenda, the plan has almost failed. It also reveal that partnership can be fostered if the Government can enact legislative backings and provide adequate policies and action for sustainable robust TVET partnership between TVET institutions and also put in place a functional quality assurance system for TVET programmes effective monitoring and evaluation of the partnership, TVET curriculum should be reviewed to be tailored towards the skills required for job specification in industries, the Government should promote the establishment of more industries by providing an enabling environment, The researchers is of the opinion that the Government should introduce policies and incentives that will support increased private sector participation in TVET delivery; as well

the Government should finance the development, launch and mainstreaming of teaching/training modules in entrepreneurship and TVET key skills at universities, polytechnics and TVET institutions. Vanguard, (2010) argued that addressing the problems of mass unemployment, low productivity, high inflation and poverty, will depend on how speedily it is able to develop the capacity of millions of its labour force into knowledgeable and skilled individuals needed for the required changes in the workplace.

Conclusions

This study investigated how partnership can be fostered between TVET institutions and industries in Lagos State. The study revealed that barely any linkages exist between TVET institutions and industries except for the students' industrial work experience scheme only. The findings also showed that there is plethora of barriers responsible for this non-existent of linkages between TVET institutions and industries which has caused many TVET graduates to be unemployed as they do not have the targeted-skills required by the multinational industries since there is no avenue available for the industry-academia to harness ideas through curricula development, personnel sharing, equipment and tools sharing e.t.c which may make the TVET graduate already adapted to their workplace environment and ready for the world of work. It is high-time we fostered partnership between TVET institutions and industries as it is needed for sustainable growth and development of TVET for socio-economic and national development in Nigeria.

Recommendations

Following the findings of the research, the following measures, if well- articulated and implemented will help address the lapses encountered in fostering partnership between TVET institutions and the industry:

1. The government should as a matter of urgency set up policies requiring compulsory linkages between institutions and industry for all existing and upcoming industries in relevant areas in order to foster employability skills among the TVET graduates.
2. The TVET institutions and the industry should collaboratively review the TVET curriculum every two years so as to inculcate the new technological advancement and the skills needed in the world of works.
3. TVET institutions should take the lead in initiating formal linkages with industries in their localities in order to solicit their support in development of the missing linkage so as to better develop the nation.
4. TVET institutions and industries partnerships should be adequately funded by the different arms of government.
5. A functional quality assurance system for TVET programmes should be put in place for effective monitoring and evaluation of the partnership
6. TVET curriculum should be reviewed to be tailored towards the skills required for job specification in industries.
7. The Government should promote the establishment of more industries by providing an enabling environment.
8. The Government should introduce policies and incentives that will support increased private sector participation in TVET delivery.

References

Abubakar, M.S. (2010). Revitalizing TVET for technology entrepreneurship and industrial development: measure, design and applicability. A paper presented at the national centre for technology management. June, 6th-18th.

Adebambo, K.A. (Ed.). (2007). *Vocational and technical Education and training*. Ibadan: Gab Esther Educational Publishers.

Amissah, A.B. (2006, June). Improving the Education Sector in Ghana's Development Agenda. Paper presented at the study tour of Asia by African

ministers of education. Paper *retrieved from*http://siteresources.worldbank.org

Choi, J., Misko, J., Phan, O., & Kang, J. K., (2001). *Linkage between vocational education and training providers and industry*. Kensington Park: NCVER.

Ezeji, S.C.O.A. (2011). Public/Private Partnership and Technology, Vocational Education and Training (TVET). A lead paper presented at the 24th Annual National Conference of the Nigerian Association of Teachers of Technology (NATT) at Federal College of Education (Technical), Umunze, 17th – 21st October, 2011.

Fannell, S. (2007). Tilting at windmills: public-private partnership in India education today. Department for International Development DFID, University of Cambridge.

Federal Republic of Nigeria. (2004). *National policy on education*. Lagos: Nigeria Education Research and Development Council Press.

Nwanegbo, C.J., & Odigbo, J. (2013). Security and national development in Nigeria: The threat of Boko Haram. *International Journal of Humanities and Social Sciences*, 3(4): 285-291.

Nwogu, P.O. & Nweanoruo, C.C (2011). Vocational technical education and training for self-reliance: towards national development. *Mediterranean Journal of Social Sciences* 5(5), 55-59.

Okuwa, O.B. (2005). Public-private partnership of higher education financing in Nigeria: the case of user fees. Revitalization of African higher Education, (Pp. 126-148). http://www.herpnet.org/THEMATIC_LIST_OF_PRESENTERS_2007.pdf Retrieved on 10/10/2011.

Organization for Economic Co-operation and Development – OECD (2008). African Economic Outlook. http://dx.doi.org/10.1787 Retrieved on 10/10/2011.

Oziegbe, U.V. (2009).Industrializing the Nigerian Society through creative skill Acquisition *Vocational and Technical Education Programme. International NGO Journal*.4, 4.142-145.

Perkinson, R. (2006, May). The continuum towards a modern TVET system. Paper presented at the TVET conference, Beijing, China.

Udoka, S.I. (2010). The global economic crisis: A challenges to curriculum of implementation in technical and vocational education technology in Nigeria. *Retrieved 20th August, 2013*fromwww.icidr.org/...2010/The%20Global%20Economic%20Crisis%20a%20.

UNESCO & ILO (2002). Technical and vocational education and training for the twenty-first century. UNESCO and ILO Recommendations.

Vanguard (2010).When unemployed youths besieged Alausa for Police Job 25, 6.14-17.

Wilson, D (2001) Viewpoints and Controversies: reform of TVET for the Changing World of Work, Prospects, Volume 31 (1).

Yakubu, A. N. (2003). Identification of Mechanisms for Regional Co-operation. In Yakubu A. N. & Mumah, S. N. (eds) Implementing the UNESCO / ILO Recommendations concerning Technical and Vocational Education and Training Final Report of the Sub-Regional Seminar for West Africa. 8-1 1 December

Yusuf, M.A. & Soyemi, J. (2012). Achieving sustainable economic development in Nigeria through technical and vocational education and training: the missing link. *International Journal of Academic Research in Business and Social Sciences*. 2(2), 71-77.

Zain, Z.M. (2008). TVET in Malaysia. http://dspace.unimap.edu.my/dspace/bitstream/123456789/7186/1/TVET%20in%20Malaysia.pdf. *Retrieved 10/10/2011*